



# Automatic License Plate Recognition for Law Enforcement



Advancements in automatic license plate recognition (ALPR) technology have enabled police agencies worldwide to apprehend more wanted suspects and recover more stolen vehicles, all while improving the safety of those on duty. Choosing the right ALPR system, though, is vital to ensure a reliable solution to detect suspected vehicles and potential threats.

## AutoVu™ System Overview

Security Center AutoVu™ provides officers the most accurate and reliable ALPR system in the industry, ensuring that thousands of plates can be read effortlessly during each shift. Available as both fixed and mobile camera systems, AutoVu™ has been engineered, tested, and proven to meet the demands of law enforcement applications.

### Hardware

The AutoVu™ Sharp family of IP-based ALPR devices leads the industry in license plate read rates, ensuring an effective solution for police operations. The Sharp and SharpX are designed to provide the most accurate plate reads every shift, more plate reads in bad weather, or at poor angles, and even at high speeds. From vehicle mounted systems to fixed perimeter installations, AutoVu™ enables organizations to automate license plate identification, and share critical data amongst officers.

### Software

AutoVu™ Patroller is the intuitive in-vehicle control interface of the AutoVu™ system, providing easily accessible features for officers onboard, and allowing them to monitor incoming reads from ALPR cameras. With touch-enabled functions, training on the system is easy for operators of all levels of technical experience.

Security Center is a unified security platform that provides real-time monitoring of AutoVu™ events, alarm management, as well as advanced data-mining and reporting capabilities. As license plate reads and hits are gathered from patrolling units in the field and from fixed AutoVu™ SharpV units, information is relayed to Security Center operators. In the case of fixed applications, not only can operators monitor the incoming reads from ALPR cameras, but can also view live video that is captured from the SharpV camera.

### Hardware

#### AutoVu™ SharpX

- Plate capture across three lanes of traffic
- Up to 5,000 plate captures per minute
- Plate capture up to differential speeds of 200 MPH (320 km/h)
- Smallest high-resolution ALPR camera on the market



#### AutoVu™ SharpV

- Easily portable from vehicle-to-vehicle
- On-board video compression and analytics
- Plate capture up to differential speeds of 140 MPH (225 km/h)
- All-in-one solution with limited wiring required



### Software

#### AutoVu™ Patroller

On-board navigation and monitoring interface. ALPR information can be sent to Security Center in real-time through live transmission.



## 5 Reasons For Choosing AutoVu™

### Highest Accuracy Rate in the Industry

Backed by over 15 years experience in ALPR technology development, and the highest plate capture and recognition rates in the industry, police agencies trust AutoVu™ to identify all license plates within the camera's field of view. By combining state-of-the-art IP-based ALPR cameras and advanced software features, AutoVu™ ensures highly-accurate verification analysis to provide officers with the best possible match of every license plate and to maximize wanted-vehicle identification within databases of vehicles of interest.



### Ease of Use

AutoVu™ is designed to automate and simplify the verification of license plates against multiple hotlists, increasing the safety of officers on patrol with a non-intrusive application that allows them to focus on other critical tasks, while alerting them, and the backoffice, when threats are detected. To ensure that operators feel at ease with this ALPR system, AutoVu™ provides a user-friendly interface and features, including touch-enabled functions, graphical maps, associated image and time captures on every read.

### Purpose-Built, Real-Time Surveillance

With ALPR cameras engineered to meet the demands of fixed and mobile law enforcement operations, and an advanced feature set to support officers on duty, the AutoVu™ system is an ideal choice for police agencies requiring a field-proven ALPR solution. Because AutoVu™ is IP-based, users get real-time surveillance and identification of plates, while officers can also monitor the live update of ALPR information using the Security Center client.

### Deploy as a Standalone or Think Bigger

AutoVu™ can easily be deployed as either a standalone system, or incorporated within a greater security and surveillance environment. Unification with video surveillance and access control systems is made easy within the Security Center™ platform and its video and access control modules, Omnicast™, and Synergis™. Through this single application, cities and police agencies can manage and monitor their ALPR and video surveillance feeds, generate consolidated reports and centralize their alarm management.

### Advanced Reporting and Data Mining Capabilities

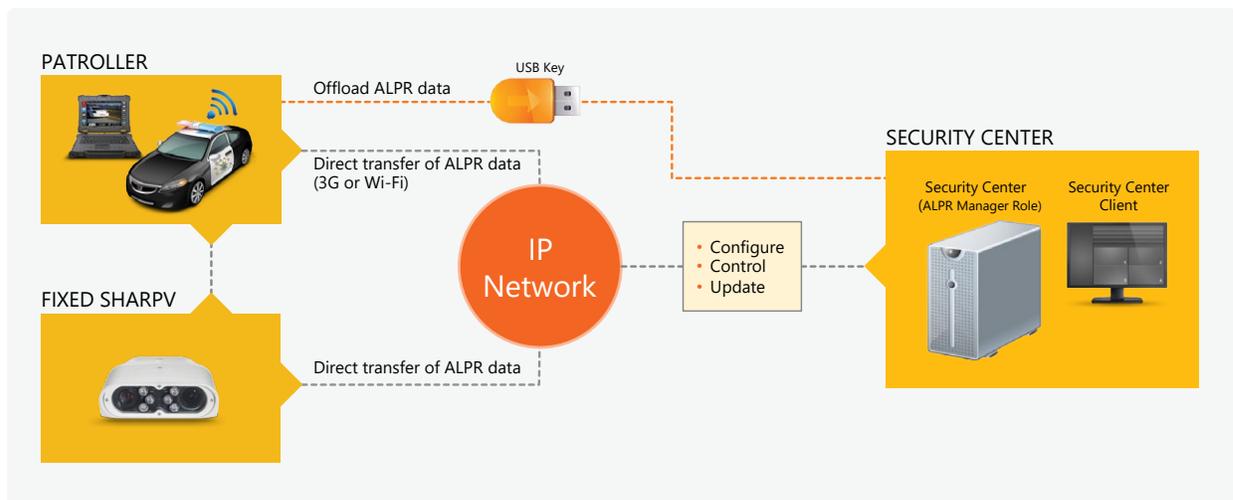
When reviewing plate reads or when receiving new wanted vehicle identifications, officers can easily search for full or partial license plates from their vehicle. Operators can rapidly review each hit corresponding to searches, as well as any associated data, including geographic coordinates.

With Security Center, users can generate a myriad of ALPR-related reports that are highly intuitive and provide operators with a great deal of flexibility, allowing them to filter results based on date, time, patrolling unit, hotlist or area, and much more. Daily usage statistics and logon reports can also be queried to retrieve hit and read statistics, route playback data, and inventory information.

Through the use of graphical displays, data is visualized and easily understood, as it is overlaid atop of maps pinpointing each read, hit, and vehicle coordinates.



### AutoVu™ System Diagram



# AutoVu™ Automatic License Plate Recognition Key Features

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**Fuzzy Matching** – Due to environmental factors, such as dirt or snow accumulation on license plates, errors sometime occur in a read. The fuzzy matching feature enhances verification within AutoVu™ to ensure that even if a read is imperfect, operators are still getting the best possible matches of every license plate to the database of vehicles of interest. Fuzzy matching analyzes incomplete license plate reads, containing one or more errors, against a hotlist and alerts the officer in case of any potential matches.

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**In-Vehicle Mapping** – AutoVu™ is equipped with intuitive graphical features, including in-vehicle mapping, to help ensure accuracy and ensure operators can remain effective while on duty. Accessible from within the vehicle or the backoffice, map displays provide operators an easier method to not only visualize the location of a read but also generates a specific location such as a street address.

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**Wildcard Hotlists** – When only partial license plate numbers are available to identify a suspect vehicle, officers can create a wildcard hotlist database in order to rapidly identify potential hits. Notifications of hotlist hits can be identified with different sounds, colors, and priority assignments than those of definite matches.

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**Covert Hotlists** – Covert hotlists are available to ensure the discretion of an on-going investigation or special operation. When a hit is identified, only the authorized officer at the Security Center station will be notified, while the in-vehicle patroller will not be alerted. This enables enforcement officials to assign multiple objectives to the vehicle and backend systems, while not interrupting the priorities of officers on duty.

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**Automatic Events and Alarms** – Officers can receive automated alarms and events from the AutoVu™ system when a black-listed, wanted, or stolen vehicle is detected. This allows officials to prioritize and respond to the events deemed most urgent.

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**Live Data Transmission** – The AutoVu™ system ensures officers are kept up-to-date with the latest information through the live update of ALPR reads and hits. Using the Security Center client, officers can remotely monitor one or more Patroller units, fixed Sharp cameras, or specific hotlists in real-time.

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**Third-Party System Integration** – Through its advanced SDK, AutoVu™ can integrate with other software applications to fit within existing workflows and operational processes.